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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/490,377	01/24/2000	Shailendra K. Mishra	ORCL5585	7079

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EXAMINER

DINH, KHANH Q

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 05/06/2004

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/490,377

Applicant(s)

MISHRA ET AL.

Examiner

Khanh Dinh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is in response to the Amendment filed on 2/24/2004 (paper # 7) and the Request for Continued Examination filed on 3/29/2004 (paper # 9). Claims 1-42 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-10, 12-24 and 26-38 are rejected under 35 U.S.C. 102(e) as being unpatentable over Natarajan et al, U.S. pat. No.6,539,427 in view of Thompson et al., US pat. No.6,189,038.

As to claim 1, Natarajan discloses a computer-implemented method of asynchronously notifying an application client (user 202 fig.2) of an event of interest within a database (data store of fig.2), comprising the steps of:

receiving a subscription to an event name from a logical agent, the event name corresponding to the event of interest within the database (using data store 252 of fig.2 to be

implemented as a database including network information and reporting the conditions of network elements in the network using notifications, see abstract, fig.2, col.6 line 43 to col. 7 line 65 and col.13 line 8 to col.14 line 63).

receiving a registration from the application client (202 fig.2), the registration including delivery information indicating at least where, how a notification concerning the event is to be delivered and detecting an occurrence of the event within the database (detecting the error by network elements, see col.7 line 66 to col.8 line 55).

publishing the notification to a data structure referenced by the event name upon detecting the occurrence of the event (using event server fig.2) and retrieving the delivery information and formatting the published notification according to the retrieved delivery information (see col.9 lines 6-65 and col.10 lines 9-61) and asynchronously delivering the formatted notification to the application client over a network (generating updated information in response to the analysis of the gathered information, see col.13 line 8 to col.14 line 64).

Natarajan does not specifically disclose the event of interest that occurs within the database.

However, Thompson discloses the event of interest that occurs within the database [using the topology manager (210 fig.2) to manage the topology database (214 fig.2) in order to update topology data related to particular events and topology updates, see Thompson's abstract, fig.2, col.6 line 13 to col.7 line 56 and col.8 lines 8-53). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Thompson's teachings into the computer system of Natarajan to monitor network topology changes because it would have enabled the sharing of events from different management protocols and allowed correlation

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of the information to make more sophisticated management decisions regarding a network (see Thompson's col.7 lines 27-56).

As to claim 2, Natarajan discloses detecting step is carried out by a trigger (using the policy engine 254 fig.2 for triggering to perform its applications and alerting to network condition) within the database, the trigger firing upon the occurrence of the event (see col.13 line 23 to col.14 line 56).

As to claim 3, Natarajan discloses that the delivery information includes an identification of a communication protocol according to which the formatted notification is to be sent (using protocol specific rules, see col.13 line 23 to col.14 line 56).

As to claims 4 and 5, Natarajan discloses the subscription including a rule that must be satisfied for the notification to be published and database access language statements (each policy containing a specific set of rules, see col.13 line 23 to col.14 line 56).

As to claim 6, Natarajan discloses the data structure includes a queue, the queue being stored as a table in the database (see col.8 lines 17-55).

As to claim 7, Natarajan discloses that if the retrieving step is carried out by an event monitor, the event monitor communicating with the database through a shared memory space (see col.10 line to col.11 line 34).

As to claim 8, Natarajan discloses the delivery information including indicia of a quality of service specified by the application client, the quality of service indicia indicating whether the notification must be delivered to the application client (notifying network element of the updated control information, see col.10 line to col.11 line 34 and col.14 lines 11-63).

As to claim 9, Natarajan discloses a temporarily undeliverable notification may be dropped if the indicia indicates that an unreliable quality of service is specified and wherein the temporarily undeliverable notification must be stored if the indicia indicates that a reliable quality of service is specified (using the policy engine to configure in monitoring a variety of network characteristics including quality of service, security, access, usage, see col.10 line to col.11 line 34 and col.14 lines 11-64).

As to claim 10, Natarajan discloses the data structure including a persistent queue when the indicia indicates that a reliable quality of service is specified, the persistent queue persisting beyond an instance of the database and wherein the data structure includes a non-persistent queue when the indicia indicates that an unreliable quality of service is specified (see col.10 line to col.11 line 34 and col.13 line 8 to col.14 line 63).

As to claim 12, Natarajan discloses the application client is remote from the database and separated therefrom by a network and wherein the delivering step delivers the formatted

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notification to the remote application client over the network (see col.10 line to col.11 line 34 and col.13 line 8 to col.14 line 63).

As to claim 13, Natarajan discloses the network includes at least one the Internet, a private network, a public network and a hybrid network (see col.1 line 59 to col.2 line 13 and col.5 lines 14-64).

As to claim 14, Natarajan discloses the event of interest including one of a data event and a system event, the data event signaling a change of interest to the application client in a data resident in the database and the system event signaling a change of interest to the application client within the computerized system storing the database network (notifying a change in network conditions, see col.10 line to col.11 line 34 and col.13 line 8 to col.14 line 63).

Claims 15-24 and 26-28 are rejected for the same reasons set forth in claims 1-10 and 12-14 respectively.

Claim 29 is rejected for the same reasons set forth in claims 1. As to the added limitations,

Natarajan discloses at least one processor (252C fig.5B), one storage device (276A fig.2) and a plurality of processes spawned by the processor (see col.23 line 9 to col.24 line 67).

Claims 30-38 and 40-42 are rejected for the same reasons set forth in claims 2-10 and 12-14 respectively.

4. Claims 11, 25 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Natarajan and Thompson as in item 3 above and further in view of Hemphill et al., US pat. No.6,167,448.

Natarajan and Thomspson's teachings still applied as in item 3 above. Neither Natarajan nor Thomspson specifically discloses formatting the message according to a protocol selected from a group including Hop, http, smtp, ftp, net8 or OFX. However, Hemphill discloses formatting the message according to a protocol selected from a group including Hop, http, smtp, ftp, net8 or OFX (converting management data into a form that can be used in the Internet technology, see abstract, col.3 line 16 to col.4 line 57).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Hemphill teachings in to the computer system of Natarajan to process data information in the network because it would have provided a flexible and powerful way to notify a management device and/or a system administrator of the management event.

Response to Arguments

5. Applicant's arguments with respect to claims 1-42 have been considered but are moot in view of the new ground(s) of rejection.

Other prior art cited

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Wagner, US pat. No.6,092,102.
- b. Thompson et al, US pat. No.6,012,095.


Conclusion

- 7. Claims 1-42 are rejected.
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Dinh whose telephone number is (703) 308-8528. The examiner can normally be reached on Monday through Friday from 8:00 A.m. to 5:00 P.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess, can be reached on (703) 305-4712. The fax phone numbers for this group is (703) 872-9306.

A shortened statutory period for reply is set to expire THREE months from the mailing date of this communication. Failure to response within the period for response will cause the application to become abandoned (35 U. S. C. Sect. 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(A).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305 -9600.


Khanh Dinh
Patent Examiner
Art Unit 2151
4/28/2004